

CLAIMS

What is claimed is:

1. A steering and suspension apparatus comprising:
 - an upper triple clamp;
 - a lower triple clamp; and
 - a shock tube,
 - (a) coupled to the triple clamps
 - (b) defining a steering axis of the apparatus,
 - (c) having a cavity coaxial with the steering axis large enough to hold a suspension component, and
 - (d) having an upper end adapted to couple to the suspension component.
2. The steering and suspension apparatus of claim 1 further comprising:
 - a pair of telescopic forks coupled to the triple clamps.
3. The steering and suspension apparatus of claim 2 wherein:
 - the telescopic forks contain neither spring components nor damping components.
4. The steering and suspension apparatus of claim 2 wherein:
 - the telescopic forks contain one of spring components and damping components.
5. The steering and suspension apparatus of claim 2 wherein:
 - the telescopic forks are ventilated to prevent pressurization during telescopic action.
6. The steering and suspension apparatus of claim 2 further comprising:
 - a fork buttress coupled to the telescopic forks.
7. The steering and suspension apparatus of claim 6 further comprising:
 - the suspension component;
 - wherein an upper end of the suspension component is coupled to the shock tube and a lower end of the suspension component is coupled to the fork buttress.

- 1 8. The steering and suspension apparatus of claim 1 further comprising:
2 the suspension component.
- 1 9. The steering and suspension apparatus of claim 8 wherein:
2 the suspension component comprises a spring.
- 1 10. The steering and suspension apparatus of claim 9 wherein:
2 the suspension component further comprises a damper.
- 1 11. The steering and suspension apparatus of claim 8 wherein:
2 the suspension component comprises a damper.
- 1 12. The steering and suspension apparatus of claim 2 wherein:
2 the telescopic forks have substantially inert suspension characteristics.
- 1 13. The steering and suspension apparatus of claim 1 wherein:
2 the shock tube includes a passageway whereby the suspension component can be
3 accessed for making suspension adjustments.
- 1 14. The steering and suspension apparatus of claim 13 further comprising:
2 the suspension component, and wherein the suspension component is adjustable for at
3 least one of,
4 ride height,
5 spring preload,
6 rebound damping, and
7 compression damping.
- 1 15. The steering and suspension apparatus of claim 14 wherein:
2 the passageway facilitates access to the suspension component substantially coaxially
3 with respect to the steering axis.
- 1 16. The steering and suspension apparatus of claim 1 further comprising:
2 a frame including a steering tube; and

3 an upper bearing and a lower bearing rotatably coupling the shock tube to the steering
4 tube.

1 17. The steering and suspension apparatus of claim 16 comprising a motorcycle.

2 18. The steering and suspension apparatus of claim 16 comprising a bicycle.

3 19. A two-wheeled vehicle comprising:

4 a frame including a steering tube defining a steering axis;
5 an upper triple clamp and a lower triple clamp rotatably coupled to the steering tube;
6 a pair of sliding-tube forks each having an upper fork tube coupled to the upper triple
7 clamp and to the lower triple clamp, and a lower fork tube;
8 a suspension component disposed substantially coaxially with the steering axis; and
9 a front wheel rotatably coupled to the lower fork tubes.

1 20. The vehicle of claim 19 wherein:

2 the suspension component comprises all of the vehicle's front spring and damping
3 components.

1 21. The vehicle of claim 19 further comprising:

2 a fork buttress coupled to the lower fork tubes;
3 wherein a bottom end of the suspension component is coupled to the fork buttress.

1 22. The apparatus of claim 21 further comprising:

2 a pair of fork lowers respectively coupled to the lower fork tubes;
3 wherein the fork buttress is formed as integral parts of the fork lowers.

1 23. The apparatus of claim 19 further comprising:

2 a shock tube disposed within the steering tube and including a passage therethrough
3 substantially coaxial with the steering axis;
4 a pair of bearings rotatably coupling the shock tube to the steering tube;
5 a top bolt coupling the shock tube to the upper triple clamp and having a passage
6 therethrough substantially coaxial with the steering axis;

7 wherein the suspension component includes a setting adjustment mechanism which is
8 accessible via the passages through the top bolt and the shock tube.

1 24. The vehicle of claim 23 wherein the setting adjustment mechanism adjusts at least one of:
2 ride height;
3 spring preload;
4 rebound damping; and
5 compression damping.

1 25. The vehicle of claim 19 wherein the vehicle comprises a motorcycle.

1 26. The vehicle of claim 19 wherein the vehicle comprises a bicycle.